

1. A method for identifying a compound useful for the treatment of a medical condition related to obesity, the method comprising determining whether a test compound activates expression of the FKHL14/FOXC2 gene, wherein activation of expression of the FKHL14/FOXC2 gene indicates that the compound is useful for the treatment of a medical condition related to obesity.
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2. The method of claim 1, further comprising determining whether the test compound is effective, in an animal, for treating the medical condition.
- 10 3. The method of claim 2, wherein the animal is a mouse.
4. The method of claim 3, wherein the mouse is an obese mouse.
- 15 5. The method of claim 3, wherein the mouse is a genetically obese mouse.
6. The method of claim 3, wherein the mouse is an ob/ob or db/db mouse.
- 20 7. The method of claim 2, wherein the method comprises determining whether the compound is effective at preventing or reducing diet induced weight gain in the animal.
8. The method of claim 2, wherein the method comprises determining whether the compound is effective at reducing adipose tissue mass in the animal.
- 25 9. The method of claim 2, wherein the method comprises determining whether the compound is effective in decreasing total body lipid content, serum triglycerides, plasma levels of free fatty acids, plasma levels of glucose, or plasma levels of insulin in the animal.

10. The method of claim 2, wherein the method comprises determining whether the compound is effective in preventing or reducing hypertriglyceridemia or insulin resistance in the animal.

5 11. The method of claim 1, wherein the medical condition is obesity.

12. The method of claim 1, wherein the medical condition is non-insulin dependent diabetes mellitus, hypertension, or hyperlipidemia.

10 13. The method of claim 2, wherein the medical condition is obesity.

14. The method of claim 2, wherein the medical condition is non-insulin dependent diabetes mellitus, hypertension, or hyperlipidemia.

15 15. The method of claim 1, wherein whether the test compound activates expression of the FKHL14/FOXC2 gene is determined by a reporter gene assay.

16. The method of claim 1, further comprising formulating the test compound as a pharmaceutical composition.

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17. The method of claim 2, further comprising formulating the test compound as a pharmaceutical composition.